

2011-04-06 Wednesday Morning Notes

Wednesday, April 06, 2011
7:25 AM

On-call

- Monday/Tuesday: Keith
- Wednesday/Thursday: Al
- Friday: JPM

Stacking and Transfers

- We stacked 26.4mA/hr with a production of 22.1 pbars/Mp and 8.31 Tp on target.
 - Best overnight stacking, we sustained 27.1mA/hr with a production of 21.7 pbars/Mp with 8.38 Tp on target.
 - Completed some cycle time work, and with the \$21 in the TLG, we appear to stack best at the 2.4 second cycle time.
- Unstacked 531E10 in 65 transfers over 22 sets with an overall efficiency of 96.1%.
 - Take away one transfer over 50mA (23936), and we get 96.2%.

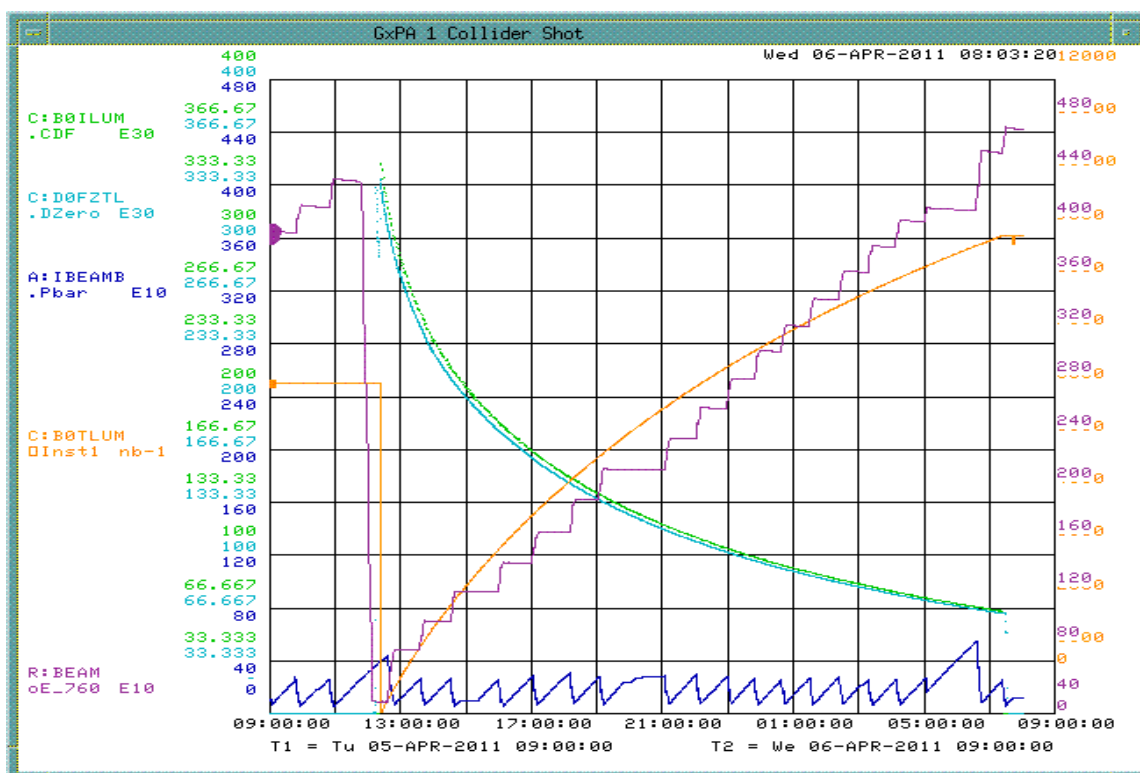
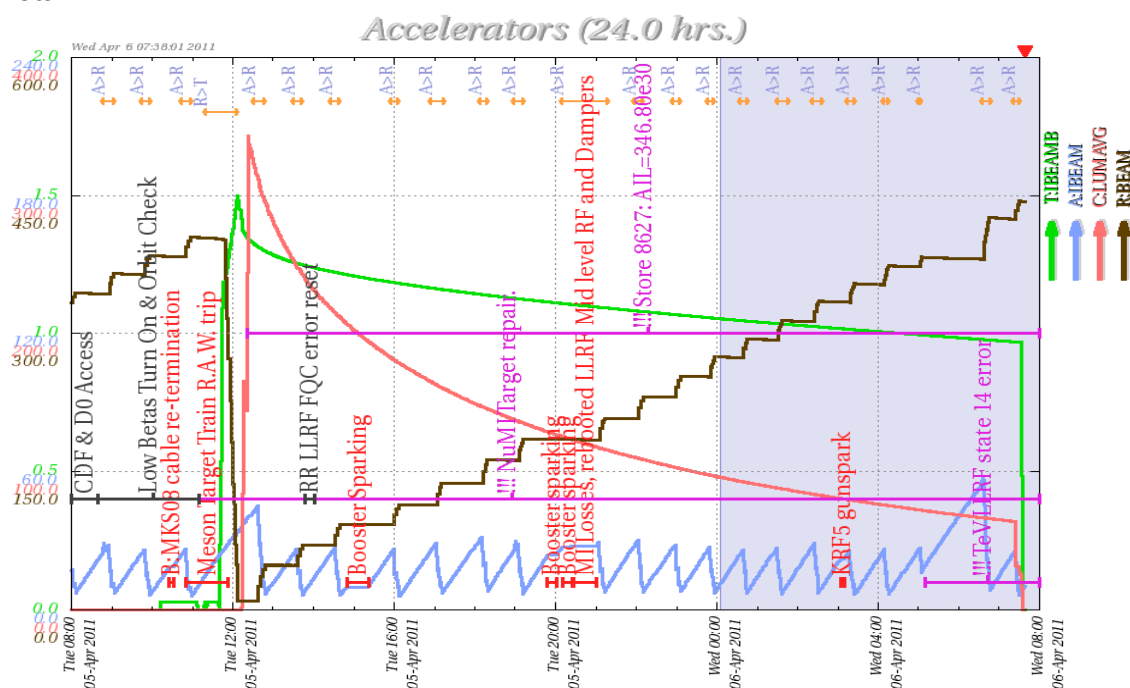
Operational Happenings

- Beam dump regulation is ok

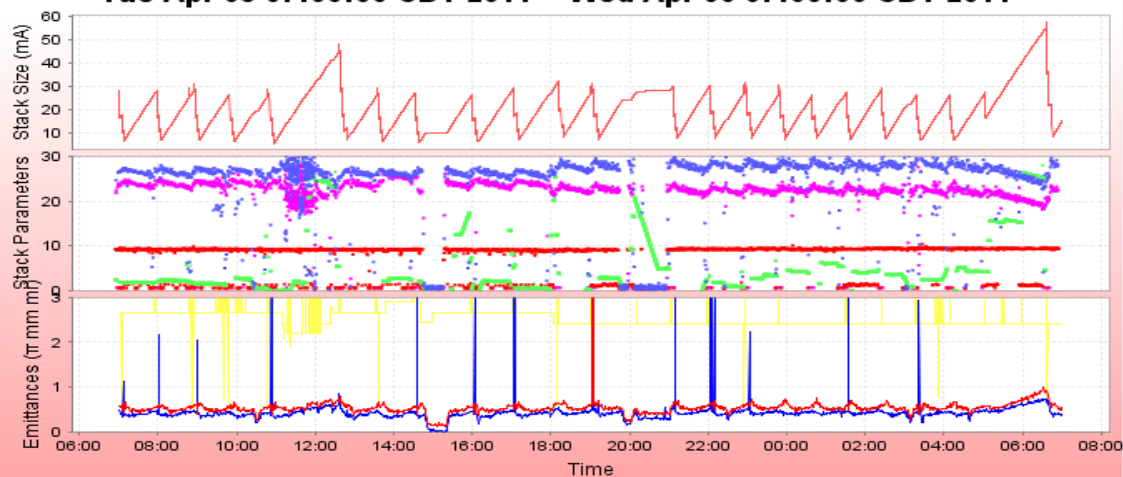
Numbers

- Stacking
 - Pbars stacked: 566.12 E10
 - Time stacking: 23.76 Hr
 - Average stacking rate: 23.83 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 33937
 - Number of pulses with beam: 30661
 - Fraction of up pulses was: 90.35%
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 21.46 Hr
 - Possible average stacking rate: 26.38 E10/Hr
 - Could have stacked: 626.61 E10/Hr
- Recycler Transfers
 - Pbars sent to the Recycler: 572.27 E10
 - Number of transfers : 70
 - Number of transfer sets: 23
 - Average Number of transfer per set: 3.04
 - Time taken to shoot including reverse proton tuneup: 00.24 Hr
 - Transfer efficiency: 95.44%
- Other Info
 - Average POT : 8.30 E12
 - Average production: 22.25 pbars/E6 protons

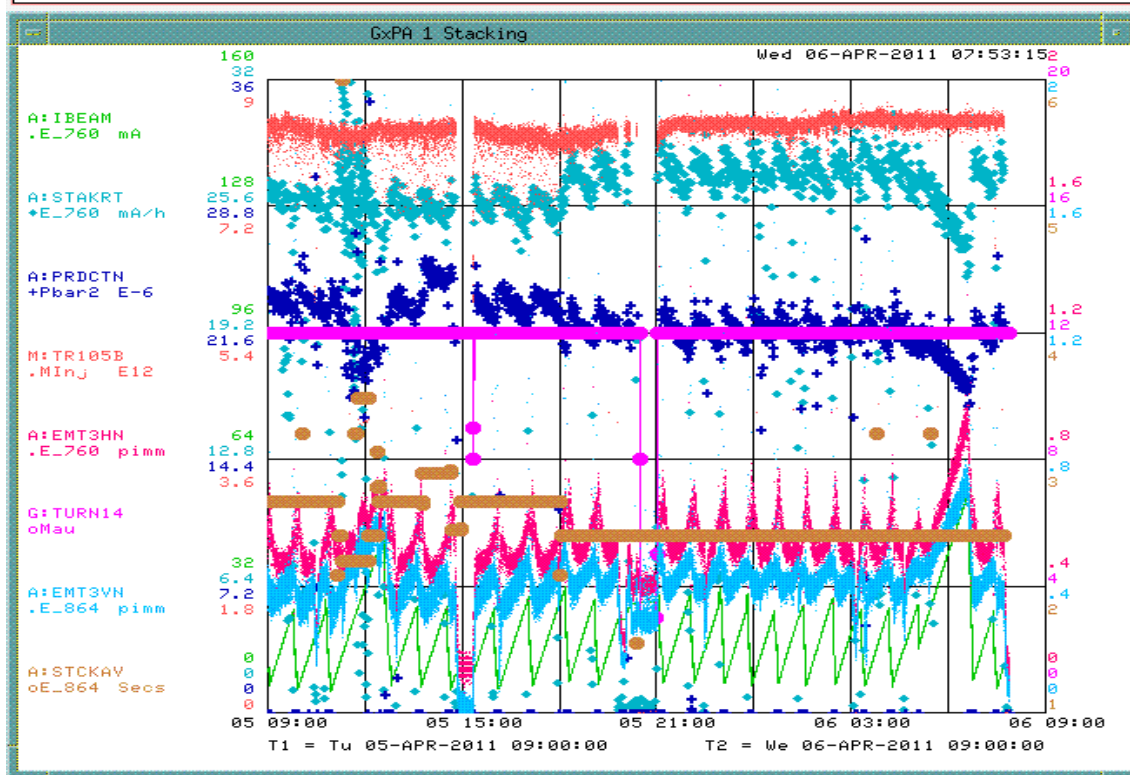
Plots

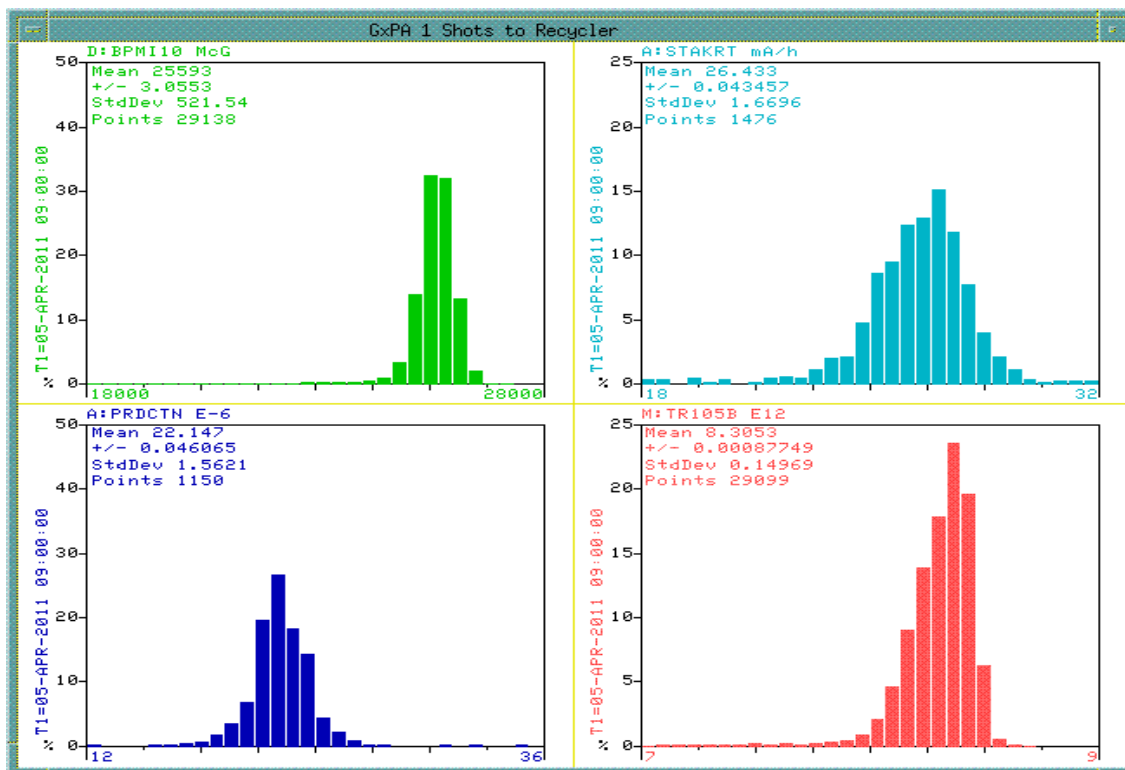


Tue Apr 05 07:00:00 CDT 2011 -- Wed Apr 06 07:00:00 CDT 2011

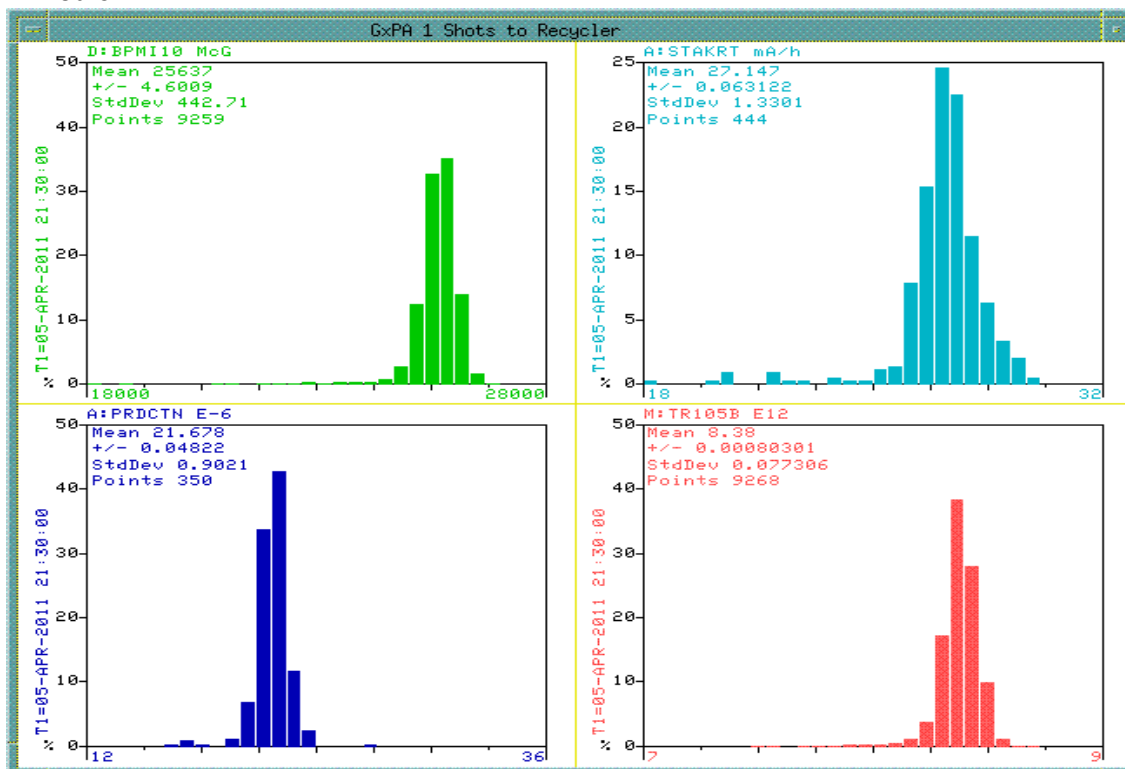


— A:IBEAM • A:STCKRT • Hourly Rate • M:TOR109 • A:PRDCTN — A:EMT3HN — A:EMT3VN
— Ave Time between \$81's

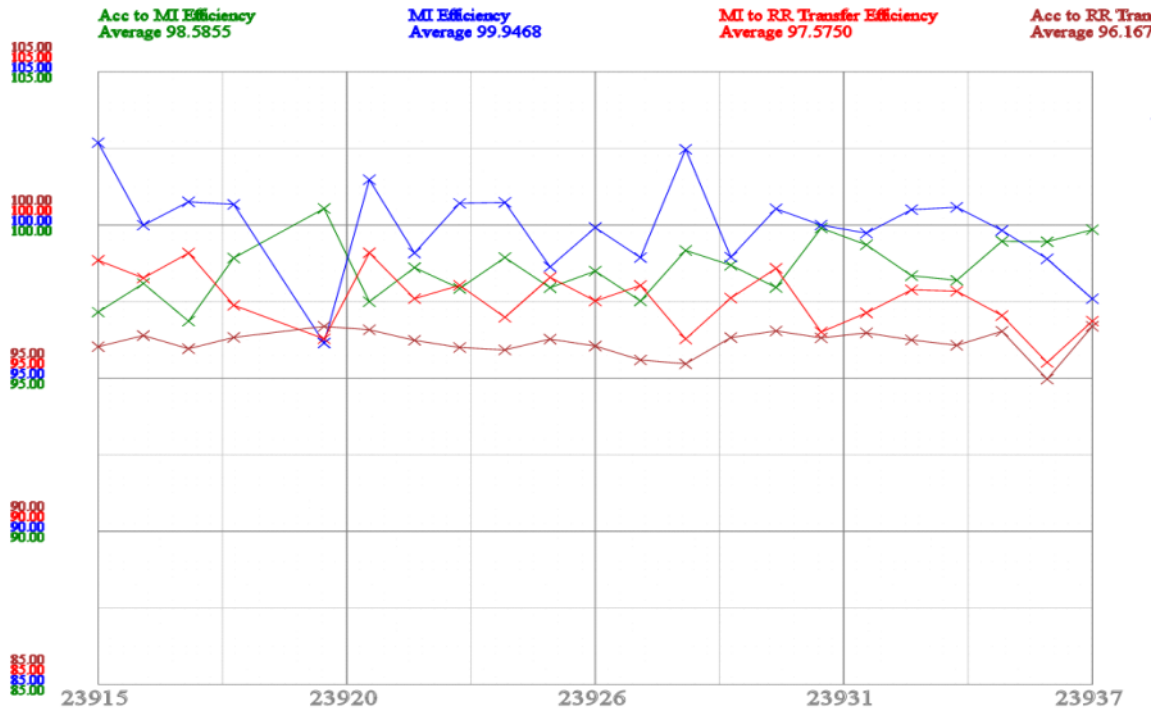




24 hours



Overnight stacking \$29s only, 21:30 to 04:00



Column 1 Number _0_Pbar Transfer Shot #	Column 4 Number_3_ Transfer Time	Column 21 Number _20_A-I BEAMB sampled on #31 (A-BEA M7), E10	Column 22 Number _21_A-I BEAMB sampled on #34 (A-BEA M9), E10	Unstacked (mA)	Column 23 Number _22_R-B EAMS (R-BEA ME0[0]) pre sfer, E10	Column 24 Number _23_R-B EAM (R-BEA ME0[1]) post sfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Trans fers	Sets	Column 5 Number_4_Acc Horizontal Emittance	Column 6 Number_5_Acc Vertical Emittance	Column 8 Number_7_Acc Longitudinal Emittance	
Totals =>				531.94			511.04	96.07%	98.42%	98.36%	96.80%	65	22	5.4351	4.0898	1.9636	
Daily Average =>				531.94			511.04					65	22				
23937	Wednesday, April 06, 2011	7:24	25.73	6.24	21.51	424.25	444.15	20.73	96.41%	99.24%	96.94%	96.21%	3	1	5.061	3.885	1.974
23936	Wednesday, April 06, 2011	6:37	55.52	8.25	50.25	380.96	426.79	47.46	94.44%	98.59%	97.93%	96.55%	4	1	6.747	4.889	1.895
23935	Wednesday, April 06, 2011	5:03	27.36	16.27	11.09	372.52	383.23	10.70	96.53%	99.47%	99.30%	98.77%	1	1	5.34	4.4	1.929
23934	Wednesday, April 06, 2011	4:09	26.42	6.58	22.08	353.21	373.97	21.24	96.19%	98.15%	98.91%	97.08%	3	1	5.458	3.86	1.982
23933	Wednesday, April 06, 2011	3:18	26.14	6.78	21.57	334.09	354.48	20.81	96.46%	98.18%	99.11%	97.31%	3	1	5.208	3.738	1.98
23932	Wednesday, April 06, 2011	2:25	28.98	7.28	23.87	313.11	335.61	23.04	96.53%	99.20%	99.02%	98.24%	3	1	5.314	4.322	1.993
23931	Wednesday, April 06, 2011	1:31	27.30	6.98	22.55	293.25	314.49	21.71	96.31%	99.09%	98.94%	98.04%	3	1	5.418	3.873	1.984
23930	Wednesday, April 06, 2011	0:38	26.04	7.47	21.15	274.21	294.24	20.43	96.62%	98.17%	98.53%	96.73%	3	1	5.51	4.281	1.983
23929	Tuesday, April 05, 2011	23:50	27.44	6.99	23.00	253.10	274.84	22.14	96.24%	98.34%	97.65%	96.03%	3	1	5.395	4.012	1.978
23928	Tuesday, April 05, 2011	22:59	28.82	7.46	24.01	231.18	253.75	22.96	95.62%	98.88%	100.95%	99.82%	3	1	5.628	4.305	1.966
23927	Tuesday, April 05, 2011	22:03	30.41	7.55	25.44	207.84	231.79	24.33	95.66%	97.38%	96.79%	94.25%	3	1	5.705	4.117	1.954
23926	Tuesday, April 05, 2011	21:06	29.81	7.60	24.86	184.81	208.36	23.91	96.17%	98.66%	98.89%	97.57%	3	1	5.703	4.628	1.995
23925	Tuesday, April 05, 2011	19:05	28.76	6.98	24.35	162.47	185.55	23.47	96.39%	98.23%	97.34%	95.62%	3	1	5.67	4.206	1.959
23924	Tuesday, April 05, 2011	18:11	32.05	7.85	26.73	137.51	162.82	25.65	95.94%	99.41%	99.27%	98.68%	3	1	5.874	4.386	1.952
23923	Tuesday, April 05, 2011	17:03	29.28	6.77	25.11	114.24	137.96	24.07	95.87%	97.93%	98.24%	96.21%	3	1	5.555	4.056	1.956
23922	Tuesday, April 05, 2011	16:00	26.55	6.15	23.02	92.58	114.49	22.16	96.24%	98.42%	97.62%	96.07%	3	1	5.313	3.773	1.973
23921	Tuesday, April 05, 2011	14:32	27.03	5.95	23.67	70.24	92.83	22.84	96.48%	97.87%	98.94%	96.82%	3	1	5.222	3.899	1.94
23920	Tuesday, April 05, 2011	13:36	26.78	6.32	23.08	48.42	70.46	22.31	96.67%	99.48%	96.49%	95.98%	3	1	5.187	4.019	1.965
23918	Tuesday, April 05, 2011	10:50	26.65	5.37	23.65	383.14	405.26	22.80	96.41%	98.78%	99.10%	97.88%	3	1	4.979	3.585	1.924
23917	Tuesday, April 05, 2011	9:49	26.25	6.01	22.92	363.86	385.26	22.05	96.20%	96.58%	98.04%	94.69%	3	1	4.939	3.755	1.961
23916	Tuesday, April 05, 2011	8:56	28.39	6.81	24.26	342.97	365.69	23.40	96.42%	98.07%	97.65%	95.77%	3	1	5.238	4.046	1.98
23915	Tuesday, April 05, 2011	7:58	27.90	6.83	23.77	322.33	344.58	22.83	96.03%	97.37%	99.23%	96.62%	3	1	5.108	3.941	1.977